

## DEPARTMENT OF DEFENSE WASHINGTON HEADQUARTERS SERVICES

1155 DEFENSE PENTAGON WASHINGTON, DC 20301-1155



December 14, 2015

Department of Environmental Quality Northern Virginia Regional Office Commonwealth of Virginia 13901 Crown Court Woodbridge, VA 22193

SUBJECT: Letter of Authorization

To Whom It May Concern:

This letter delegates Joseph Eichenlaub, Branch Manager of the Environmental, Sustainability and Energy Branch, as an authorized representative to sign Discharge Monitoring Reports (DMRs) for VPDES Permit VA0032000 from January 2016 until the expiration of the permit. This letter is in continuation of the agreement in place for the previous VPDES permit.

In the absence of Joseph Eichenlaub, Dr. Sri Susarla will take responsibility to enter DMR data and certify the results.

Craig M. Georg

Director, Standards and Compliance Division

Pentagon, Room 5D325 Office: (703) 695-3420 Cell: (703) 678-3448

Cin M. Sean

Email: craig.m.georg.civ@mail.mil

D. STATE

E. ZIP CODE

F. COUNTY CODE (if known)

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C. CITY OR TOWN

B. COUNTY NAME

OLD JEFFERSON DAVIS HIGHWAY

**FACILITY LOCATION** 

VI.

5 425

AR'LINGTON

CONTINUED FROM THE FRONT	
VII. SIC CODES (4-digit, in order of priority)  A. FIRST	B. SECOND
C (specify) STEAM AND AIR-CONDITIONING SUPPLY	C   (specify)NATIONAL SECURITY
7 4961	7 9711
C. THIRD	D. FOURTH
c  (specify)N/A	c         (specify) N/A
15 16 - 19	15 16 - 19
VIII. OPERATOR INFORMATION	
A. NAME C.   1   1   1   1   1   1   1   1   1	B. Is the name listed in Item  VIII-A also the owner?  ZYES □ NO
C. STATUS OF OPERATOR (Enter the appropriate letter into the	
	(specify) N/A
E. STREET OR P.O. BOX	15   6 - 18   19 - 21   22 -
1155 DEFENSE PENTAGON, ROOM 5D325 WHS/FSD/S	CD CD
26	55
F. CITY OR TOWN  B WASHINGTON	G. STATE H. ZIP CODE IX. INDIAN LAND
X. EXISTING ENVIRONMENTAL PERMITS	
	Emissions from Proposed Sources)
9 N VA0032000 9 P 70030	30
B. UIC (Underground Injection of Fluids)	E. OTHER (specify)
C   T   1   N/A   9   PBR197	(specify) Solid Waste - Incinerator
C. RCRA (Hazardous Wastes)	E. OTHER (specify)
9 R VA2210090021 9 VAR04(	(specify) MS4
15 16 17 18 30 15 16 17 18	30
location of each of its existing and proposed intake and discharge structures, each injects fluids underground. Include all springs, rivers, and other surface water bodie XII. NATURE OF BUSINESS (provide a brief description)	ne mile beyond property boundaries. The map must show the outline of the facility, the nof its hazardous waste treatment, storage, or disposal facilities, and each well where as in the map area. See instructions for precise requirements.  Defense (DoD). The DoD operates a chiller plant, which
provides chilled water for cooling buildings on the Perform the Boundary Channel (Pentagon) Lagoon, pumped th	ntagon Reservation. Non-contact cooling water is drawn rough screens and strainers, and used for the chiller Mexel 432/0, a liquid copper corrosion inhibitor, is adde r levelgin the discharge. Non-contact cooling water is
XIII. CERTIFICATION (see instructions)	
	n the information submitted in this application and all attachments and that, based on matained in the application, I believe that the information is true, accurate, and complete. Ing the possibility of fine and imprisonment.
A. NAME & OFFICIAL TITLE (type or print)  B. SIGNATUF	
	in M. Man 17 Doc 15
SCD Director	7/1/ Mor 1:
COMMENTS FOR OFFICIAL LISE ONLY	1 040 10
COMMENTS FOR OFFICIAL USE ONLY	
lc	

EPA I.D. NUMBER (copy from Item 1 of Form 1)

VA0032000

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

Please print or type in the unshaded areas only.

PORM 2C SEPA

# U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS Consolidated Permits Program

I. OUTFALL LOCATION							
For each outfall, list the	latitude and	longitude of its	s location to t	he nearest 15	seconds and	the name of	f the receiving water.
A. OUTFALL NUMBER		B. LATITUDE		С	. LONGITUDI	E	
(list)	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	D. RECEIVING WATER (name)
001	38	51	55	77	02	46	Roaches Run
002	38	52	07	77	02	36.6	Roaches Run

#### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

- A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.
- B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUT-	2. OPERATION(S) CONT	TRIBUTING FLOW	3. TREATMENT							
FALL NO. ( <i>list</i> )	a. Of LIVATION (1131)	b. AVERAGE FLOW (include units)	a. DESCRIPTION		DES FROM E 2C-1					
001	10 CHILLER CONDENSERS: water travels	(emergency use/maintenance	NON-CONTACT COOLING WATER; treated with Mexel 432/0 for corrosion inhibition of piping system	4 - A						
	through copper tubing where heat is	only)	Additional information is attached.							
Verification of the Control of the C	rejected from chilled water.	*Flow is the same as it would								
		be through Outfall 002								
002	10 CHILLER CONDENSERS: water travels	130 MGD (maximum design flow)	NON-CONTACT COOLING WATER; treated with Mexel 432/0 for corrosion inhibition of piping ssytem	4 - A						
	through copper tubing where heat is	22 MGD (average flow January								
	rejected from chilled water.	2010 to April 2015)								
					7.100					
					***************************************					

OFFICIAL USE ONLY (effluent guidelines sub-categories)

CONTINUED FF	ROM THE FRONT									
C. Except for s	torm runoff, leaks, or sp		f the discharges	described i			asonal?		7.40	
<b>V</b>	YES (complete the follow	wing table)			NO (go to Se	ction III)		***************************************		MISCH 1
**Consistance					REQUENCY			4. FLOV	<del></del>	···
		PERATION(s)		a. DAYS P WEEK	b. MONTHS	a. FLOW RA	ATE (in mgd)		OTAL VOLUME ecify with units)	
1. OUTFALL NUMBER (list)	CONTR	IBUTING FLOV	V	(specify average)		1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG T AVERA		
001	Non-contact cool: chiller condense: maintenance only)	rs (emerge		0		0	0	0	0	O
B. Are the limits	DN  yes (complete Item III-) ations in the applicable of YES (complete Item III-) ered "yes" to Item III-B,	B)  effluent guide $C$ )	line expressed i	n terms of p	NO (go to Se roduction (or other NO (go to Se	ction IV) measure of ope ction IV)	eration)?	pressed in	the terms and	units used in the
	ffluent guideline, and in	dicate the aff	ected outfalls.					7	- are terms and	units asca in the
a. QUANTITY	PER DAY b. UNITS	1. AV S OF MEASU	RE DAILY	······································	ON ATION, PRODUCT (specify)	, MATERIAL, E	TC.	2	t. AFFECTED O	
	w required by any Fed				iny implementation					
	quipment or practices or itions, administrative or YES (complete the follow	enforcement				ers, stipulations,				
	TION OF CONDITION, EMENT, ETC.	2. AF	ECTED OUTFA	ALLS	3. BRIEF	DESCRIPTION	N OF PROJEC	T	4. FINAL CON	IPLIANCE DATE
		a. NO.	b. SOURCE OF I	DISCHARGE		**************************************			a. REQUIRED	b. PROJECTED
Name of the latest of the late										

V.IMPROVEMENTS						
A. Are you now required by any treatment equipment or practice	es or any other e e or enforcement	nvironmental programs whic	any implementation schedule for the construction th may affect the discharges described in this appliance schedule letters, stipulations, court orders, a NO (go to Item IV-B)	ication? T	his includes, but	is not limited to,
1. IDENTIFICATION OF CONDITI	ON, 2. AF	FECTED OUTFALLS	3. BRIEF DESCRIPTION OF PROJECT		4. FINAL COM	IPLIANCE DATE
B. OPTIONAL: You may attach :	a. NO.	b. SOURCE OF DISCHARGE	water pollution control programs (or other envir	opmental	a. REQUIRED	b. PROJECTED
discharges) you now have und construction.	erway or which y		ach program is now underway or planned, and inc			
EPA Form 3510-2C (8-90)		PAG	GE 2 of 4		CONTIN	UE ON PAGE 3

# EPA I.D. NUMBER (copy from Item 1 of Form 1)

CONTINUED FROM PAGE 2

VA0032000

V. INTAKE AND EFFLUENT CHARACTE			
A, B, & C: See instructions before proce NOTE: Tables V-A, V-B, and	eding – Complete one set of tables for each V-C are included on separate sheets numbe	outfall – Annotate the outfall number in the street V-1 through V-9.	space provided.
D. Use the space below to list any of the	pollutants listed in Table 2c-3 of the instruction list, briefly describe the reasons you believe	tions, which you know or have reason to be	elieve is discharged or may be discharged data in your possession.
1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
N/A	N/A	N/A	N/A
	į.		
VI. POTENTIAL DISCHARGES NOT COV	/EDED BY ANALYSIS		
	ance or a component of a substance which yo	Ou currently use or manufacture as an interr	mediate or final product or hyproduct?
YES (list all such pollutants	below)	NO (go to Item VI-B)	mediate of final product of byproduct?

## CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA			
Do you have any knowledge or reason to beli relation to your discharge within the last 3 year	eve that any biological test for acute or chronic toxici	ty has been made on any of your dis	charges or on a receiving water in
YES (identify the test(s) and des		NO (go to Section VIII)	
Annual biological toxicity te analysis for C. dubia and P.	esting data was reviewed for the personal state of the toxicity test for each period at the toxicity test fo	eriod June 2010 through	ronic). Based on these
VIII. CONTRACT ANALYSIS INFORMATION			
	performed by a contract laboratory or consulting firm	?	
<b>-21</b>			
each such laboratory or fir.	d telephone number of, and pollutants analyzed by, m below)	NO (go to Section IX)	
A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Aerobiology Laboratory	43760 Trade Center Place, Suite 100, Sterling, VA 20166	877-648-9150	Coliforms, Enterococci
ALS Environmental - Middletown	34 Dogwood Lane, Middletown, PA 17057	717-944-1430	Mercury, total sulfide, TOC, phenolics
Eurofins Lancaster Laboratories Environmental	2425 New Holland Pike, Lancaster, PA 17605	717-656-2300	Dioxins
Martel Laboratories JDS, Inc.	1025 Cromwell Bridge Road, Baltimore, MD 21286	410-825-7790	Color, Kjeldahl nitrogen, BOD, surfactants
Phase Separation Science, Inc.	6630 Baltimore National Pike, Baltimore, MD 21228	410-747-8770	All other samples
TestAmerica Burlington	30 Community Drive, Suite 11, South Burlington, VT 05403	802-660-1990	Organotins
TestAmerica Pittsburgh	301 Alpha Drive, RIDC Park, Pittsburgh PA 15238	1, 412-963-7058	Semivolatile organic compounds, organochlorine pesticides, organophosphorus compounds
TestAmerica St. Louis	13715 Rider Trail North, Earth City, N 63045	314-298-8566	Total alpha, total beta, radium-226
IX. CERTIFICATION			
qualified personnel properly gather and eva directly responsible for gathering the informa-	ent and all attachments were prepared under my dir aluate the information submitted. Based on my inqu ation, the information submitted is, to the best of my information, including the possibility of fine and impri-	uiry of the person or persons who i knowledge and belief, true, accurate	manage the system or those persons
A. NAME & OFFICIAL TITLE (type or print)	and the state of t	B. PHONE NO. (area code & no.)	O YAOMISHASI CHARITIZAN COLUMNIZI MAZINCANI MARINI
Craig Georg, SCD Director		(703) 695-3420	
C. SIGNATURE	1	D. DATE SIGNED	*Many
Cyn, J	ly	17 Dec 1	/

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (*use the same format*) instead of completing these pages. SEE INSTRUCTIONS.

EPA i.D. NUMBER (copy from Item 1 of Form 1)

VA0032000 OUTFALL NO. V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C) 02 PART A -You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details 3. UNITS 4. INTAKE 2 FEELLIENT (specify if blank) (optional) b. MAXIMUM 30 DAY VALUE c. LONG TERM AVRG. VALUE a. LONG TERM AVERAGE VALUE a. MAXIMUM DAILY VALUE (if available) (if available) d. NO. OF ANALYSES a. CONCEN-TRATION b. NO. OF ANALYSES (1) CONCENTRATION (1) CONCENTRATION (1) CONCENTRATION 1. POLLUTANT (2) MASS (2) MASS b. MASS (2) MASS (1) CONCENTRATION (2) MASS a. Biochemical Oxygen Demand (BOD) ND 1 mg/L b. Chemical Oxygen Demand (COD) ND 1 mg/L c. Total Organic Carbor (TOC) 3.5 1 mg/L d. Total Suspended Solids (TSS) 3.0 1 mg/Le. Ammonia (as N) ND 1 mg/L VALUE VALUE 20 (max for 2014) VALUE VALUE f. Flow 12 MGD VALUE g. Temperature (winter) VALUE VALUE VALUE 25.00 3 °C h. Temperature (summer) VALUE VALUE VALUE VALUE 31.67 °C 3 MINIMUM 6.3 MAXIMUM 8.3 MINIMUM MAXIMUM i. pH STANDARD UNITS 12 PART B — Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements. 2. MARK "X" 3. EFFLUENT 4. UNITS 5. INTAKE (optional) 1. POLLUTANT b. MAXIMUM 30 DAY VALUE c. LONG TERM AVRG. VALUE a. LONG TERM AVERAGE AND CAS NO. a. MAXIMUM DAILY VALUE b. BELIEVED ABSENT (if available) (if available) VALUE d. NO. OF ANALYSES a. CONCEN-TRATION BELIEVED PRESENT b. NO. OF (1) CONCENTRATION (1) (if available) (2) MASS (2) MASS CONCENTRATION b. MASS CONCENTRATION (2) MASS CONCENTRATION ANALYSES a. Bromide (24959-67-9) ND 1 mg/L b. Chlorine, Total Residual ND 1 mg/L c. Calar 100 1 chloropl d. Fecal Coliform 25.9 MPN 1 /100 mL e. Fluoride (16984-48-8) ND mg/L 1 f. Nitrate-Nitrite 0.52 7 mg/L

ITEM V D	CONTINI	IED	FROM	FRONT	

ITEM V-B CONT	INUED FR	OM FRONT												
	2. MA	RK "X"				EFFLUENT	4. UNI	rs	5. INT.	al)				
1. POLLUTANT AND CAS NO.	a. BELIEVED	b. BELIEVED	a. MAXIMUM DA	ALY VALUE	b. MAXIMUM 30 (if availa		c. LONG TERM A (if availa		d. NO. OF	a. CONCEN-		a. LONG TE AVERAGE V		b. NO. OF
(if available)	PRESENT	ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TRATION	b. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
g. Nitrogen, Total Organic (as N)	X		1.12						1	mg/L				
h. Oil and Grease		X	ND						1	ug/L				
i. Phosphorus (as P), Total (7723-14-0)		$\times$	ND						1	mg/L				
j. Radioactivity														
(1) Alpha, Total	X		0.247						1	pCi/L				
(2) Beta, Total	X		0.652	***					1	pCi/L				
(3) Radium, Total		X	See lab	report	for	explana	tion							
(4) Radium 226, Total		X	-0.0167						1	pCi/L				
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X		25				Transport		1	mg/L				
l. Sulfide (as S)		X	ND						1	mg/L				
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)	X		1.28						1	mg/L				
n. Surfactants		X	ND				-	·	1	mg/L				
o. Aluminum, Total (7429-90-5)		X	ND				and the control of th		1	ug/L				
p. Barium, Total (7440-39-3)	X		41						1	ug/L				
q. Вогоп, Total (7440-42-8)	X		24						1	ug/L				
r. Cobalt, Total (7440-48-4)		X	ND						1	ug/L				
s. Iron, Total (7439-89-6)	X		110						1	ug/L				
t. Magnesium, Total (7439-95-4)	X		7,200						1	ug/L		-		
u. Molybdenum, Total (7439-98-7)		X	ND						1	ug/L		Proposition and		
v. Manganese, Total (7439-96-5)	X		48						1	ug/L				
w. Tin, Total (7440-31-5)		X	ND						1	ug/L				
x. Titanium, Total (7440-32-6)		X	ND						1	ug/L		Companyation seems		

EPA I.D. NUMBER (copy from Item 1 of Form 1) OUTFALL NUMBER VA0032000

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you will be discharged in concentrations of 10 ppb or greater. If you mark column 2-b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for that pollutant. If you mark column 2-b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe hat you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must provide the results of at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

addition	al details ar											( ,	900, 101 0401 001		. 600,0710 107
		2. MARK "X	н	3. EFFLUENT								ITS	5. INTAKE (optional)		
1. POLLUTANT AND CAS NUMBER	a. TESTING	b. BELIEVED	C.	a. MAXIMUM DA	ILY VALUE	b. MAXIMUM 30 (if availa		c. LONG TERM VALUE (if av					a. LONG T AVERAGE \	ERM	
(if available)	REQUIRED	PRESENT	ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
METALS, CYANID	E, AND TOT	AL PHENC	LS				<u> </u>			<u> </u>			CONSCIUNCIA	12/11/100	1
1M. Antimony, Total (7440-36-0)			X	ND						1	ug/L				
2M. Arsenic, Total (7440-38-2)			X	ND						1	ug/L				
3M. Beryllium, Total (7440-41-7)			X	ND						1	ug/L				
4M. Cadmium, Total (7440-43-9)			X	ND						1	ug/L			*****	<del>                                     </del>
5M. Chromium, Total (7440-47-3)			X	ND						1	ug/L				<u> </u>
6M. Copper, Total (7440-50-8)		X		16						1	ug/L				
7M. Lead, Total (7439-92-1)			X	ND						1	ug/L				
8M. Mercury, Total (7439-97-6)			X	ND						1	mg/L			***************************************	<b></b>
9M. Nickel, Total (7440-02-0)		X		1.0						1	ug/L				<u> </u>
10M. Selenium, Total (7782-49-2)			X	ND						1	ug/L				
11M. Silver, Total (7440-22-4)			X	ND						1	ug/L				
12M. Thallium, Total (7440-28-0)			X	ND			*******************************			1	ug/L				
13M. Zinc, Total (7440-66-6)			X	ND						1	ug/L				
14M. Cyanide, Total (57-12-5)			X	ND						1	mg/L				
15M. Phenols, Total		X		0.240						1	mg/L				
DIOXIN					<del>*************************************</del>	·				·					<del></del>
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin (1764-01-6)			X	DESCRIBE RESU Most recent sam 1.	JLTS ple analyze	ed for dioxin was	taken 5/12	/2015. Results an	rrived non-	-detect (ND)	for 2,3,7,8-	TCDD using	EPA Method SW-84	6 8290A Fel	b 2007 Rev

CONTINUER	FROM	THE	EDUNIT

CONTINUED FROM	M THE FRO	NT													
	2	2. MARK "X				3. EFFLUENT					4. UN	ITS	5. INTAKE (optional)		
1. POLLUTANT AND	a.	b.	c.	a. MAXIMUM DA	ILY VALUE	b. MAXIMUM 30 l (if availa		c. LONG TERN VALUE (if avo					a. LONG T AVERAGE V		
CAS NUMBER (if available)	TESTING REQUIRED	BELIEVED PRESENT	BELIEVED ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	a. CONCEN- TRATION	b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION	- VOLATIL	E COMPO	UNDS												
1V. Accrolein (107-02-8)			X	ND						1	ug/L				
2V. Acrylonitrile (107-13-1)			X	ND						1	ug/L				
3V. Benzene (71-43-2)			X	ND						1	ug/L				
4V. Bis (Chloro- methyl) Ether (542-88-1)			X	ND						1	ug/L				
5V. Bromoform (75-25-2)			X	ND						1	ug/L				
6V. Carbon Tetrachloride (56-23-5)			X	ND						1	ug/L		Procedure and the second		
7V. Chlorobenzene (108-90-7)			X	ND						1.	ug/L				
8V. Chlorodi- bromomethane (124-48-1)			X	ND						1	ug/L				
9V. Chioroethane (75-00-3)			X	ND						1	ug/L				
10V. 2-Chloro- ethylvinyl Ether (110-75-8)			X	ND						1	ug/L				
11V. Chloroform (67-66-3)			X	ND						1	ug/L				
12V. Dichloro- bromomethane (75-27-4)			X	ND						1	ug/L				
13V. Dichloro- difluoromethane (75-71-8)			X	ND						1	ug/L				
14V. 1,1-Dichloro- ethane (75-34-3)			X	ND				***************************************		1	ug/L				
15V. 1,2-Dichloro- ethane (107-06-2)			X	ND						1	ug/L				
16V. 1,1-Dichloro- ethylene (75-35-4)			X	ND						1	ug/L				
17V. 1,2-Dichloro- propane (78-87-5)			X	ND						1	ug/L			***************************************	
18V. 1,3-Dichloro- propylene (542-75-6)			X	ND						1	ug/L				
19V. Ethylbenzene (100-41-4)			X	ND						1	ug/L				
20V. Methyl Bromide (74-83-9)			X	ND						1	ug/L				
21V. Methyl Chloride (74-87-3)			X	ND						1	ug/L				

		2. MARK "X	,				FFLUENT				4. UN	ITS	5. INTA	KE (optiona	ıl)
1. POLLUTANT AND CAS NUMBER	a.	b. BELIEVED	c.	a. MAXIMUM DA	ILY VALUE	b. MAXIMUM 30 I (if availat		c. LONG TERM VALUE (if av		4 10 05	- 001/051		a. LONG T AVERAGE V	ERM	
	REQUIRED		ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCEN- TRATION	b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OI ANALYSE
GC/MS FRACTION	- VOLATIL	E COMPO	JNDS (con	tinued)				<u>'</u>		-l	<u> </u>	l	1	(2) 10 100	J
22V. Methylene Chloride (75-09-2)			X	ND						1	ug/L				
23V. 1,1,2,2- Tetrachloroethane (79-34-5)			X	ND						1	ug/L				
24V. Tetrachloro- ethylene (127-18-4)			X	ND						1	ug/L				
25V. Toluene (108-88-3)			X	ND						1	ug/L				
26V. 1,2-Trans- Dichloroethylene (156-60-5)			X	ND						1	ug/L				
27V. 1,1,1-Trichloro- ethane (71-55-6)			X	ND						1	ug/L				
28V. 1,1,2-Trichloro- ethane (79-00-5)			X	ND						1	ug/L			***************************************	
29V Trichloro- ethylene (79-01-6)			X	ND						1	ug/L				
30V. Trichloro- fluoromethane (75-69-4)			X	ND					************	1	ug/L				
31V. Vinyl Chloride (75-01-4)			X	ND						1	ug/L				
GC/MS FRACTION	- ACID CO	MPOUNDS	1							<u> </u>			<u></u>		
1A. 2-Chlorophenol (95-57-8)			X	ND						1	mg/L				

1

1

1

1

1

1

1

1

1

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

mg/L

CONTINUED FROM PAGE V-4

2A. 2,4-Dichloro-phenol (120-83-2)

3A. 2,4-Dimethyl-phenol (105-67-9)

4A. 4,6-Dinitro-O-Cresol (534-52-1)

5A. 2,4-Dinitro-phenol (51-28-5) 6A. 2-Nitrophenol (88-75-5)

7A. 4-Nitrophenol (100-02-7) 8A. P-Chloro-M-Cresol (59-50-7)

9A. Pentachloro-phenol (87-86-5)

10A. Phenoi (108-95-2)

ND

ND

ND

ND

ND

ND

ND

ND

ND

11A. 2,4,6-Trichloro-phenol (88-05-2) ND mg/L 1 EPA Form 3510-2C (8-90) PAGE V-5 CONTINUE ON REVERSE

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CONTINUED FRO	M THE FRO	TNC													
	2	2. MARK "X					FFLUENT				4. UN	ITS	5. INT <i>A</i>	KE (option	ıl)
1. POLLUTANT AND	a.	b. BELIEVED	c.	a. MAXIMUM DA	LY VALUE	b. MAXIMUM 30 (if availa		c. LONG TERM VALUE (if ava		4 NO OF	- CONCEN		a. LONG T AVERAGE V		
CAS NUMBER (if available)	TESTING REQUIRED	PRESENT	ABSENT	CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		a. CONCEN- TRATION	b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION	- BASE/NE	EUTRAL CO	MPOUND	S											
1B. Acenaphthene (83-32-9)			X	ND						1	mg/L				
2B. Acenaphtylene (208-96-8)			X	ND						1	mg/L				
3B. Anthracene (120-12-7)			X	ND						1	mg/L				
4B. Benzidine (92-87-5)			X	ND						1	mg/L				
5B. Benzo (a) Anthracene (56-55-3)			X	ND						1	mg/L				
6B. Benzo (a) Pyrene (50-32-8)			X	ND						1	mg/L				
7B. 3,4-Benzo- fluoranthene (205-99-2)			X	ND						1	mg/L				
8B. Benzo ( <i>ghi</i> ) Perylene (191-24-2)			X	ND						1	mg/L				
9B. Benzo (k) Fluoranthene (207-08-9)			X	ND						1	mg/L				
10B. Bis (2-Chloro- ethoxy) Methane (111-91-1)			X	ND						1	mg/L				
11B. Bis (2-Chloro- ethyl) Ether (111-44-4)	***************************************		X	ND						1	mg/L		and the state of t		
12B. Bis (2- Chloroisopropyl) Ether (102-80-1)			X	ND						1	mg/L		TANGE OF THE PARTY		A CONTRACTOR AND A CONT
13B. Bis (2-Ethyl- hexyl) Phthalate (117-81-7)	-		X	ND						1	mg/L				
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X	ND						1	mg/L				
15B. Butyl Benzyl Phthalate (85-68-7)			X	ND						1	mg/L				
16B. 2-Chloro- naphthalene (91-58-7)			X	ND						1	mg/L		and a second sec		
17B, 4-Chloro- phenyl Phenyl Ether (7005-72-3)			X	ND				The second secon		1	mg/L				
18B. Chrysene (218-01-9)			X	ND						1	mg/L				
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	ND						1	mg/L				
20B. 1,2-Dichloro- benzene (95-50-1)			X	ND						1	ug/L				
21B. 1,3-Di-chloro- benzene (541-73-1)			$\times$	ND						1	ug/L				

CONTINUED FROM				Ţ		····									
	2	MARK "X	n				FFLUENT	~~~~~		,	4. UN	ITS		AKE (optiona	/)
1. POLLUTANT AND CAS NUMBER	a. TESTING	b.	c.	a. MAXIMUM DA	LY VALUE	b. MAXIMUM 30 [ (if availal		c. LONG TERM VALUE (if ava		4 200 05	a, CONCEN-		a. LONG T AVERAGE \		
(if available)	REQUIRED	BELIEVED PRESENT	ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES		b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION	- BASE/N	EUTRAL CO	OMPOUND				la minute de la minute della minute della minute de la minute de la minute de la minute della mi						1		<del>1</del>
22B. 1,4-Dichloro- benzene (106-46-7)			X	ND						1	ug/L				
23B. 3,3-Dichloro- benzidine (91-94-1)			X	. ND						1	mg/L				
24B. Diethyl Phthalate (84-66-2)			X	ND						1	mg/L				
25B. Dimethyl Phthalate (131 -11-3)			X	ND						1	mg/L				
26B. Di-N-Butyl Phthalate (84-74-2)			X	ND						1	mg/L				
27B. 2,4-Dinitro- toluene (121-14-2)			X	ND						1	mg/L				
28B. 2,6-Dinitro- toluene (606-20-2)			X	ND						1	mg/L				
29B. Di-N-Octyl Phthalate (117-84-0)			X	ND						1	mg/L				
30B. 1,2-Diphenyl- hydrazine (as Azo- benzene) (122-66-7)			X	ND						1.	mg/L				
31B. Fluoranthene (206-44-0)			X	ND						1	mg/L			-	
32B. Fluorene (86-73-7)			X	ND			***************************************			1	mg/L				
33B. Hexachloro- benzene (118-74-1)			X	ND						1	mg/L				
34B. Hexachloro- butadiene (87-68-3)			X	ND						1	mg/L				
35B. Hexachioro- cyclopentadiene (77-47-4)			X	ND						1	mg/L				
36B Hexachloro- ethane (67-72-1)			X	ND						1	mg/L				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	ND						1	mg/L				
38B. Isophorone (78-59-1)			X	ND						1	mg/L				
39B. Naphthalene (91-20-3)			X	ND			SURTINI CONTROL CONTRO			1	mg/L				
40B. Nitrobenzene (98-95-3)			X	ND						1	mg/L				
41B. N-Nitro- sodimethylamine (62-75-9)			X	ND						1	mg/L				
42B. N-Nitrosodi- N-Propylamine (621-64-7)			X	ND						1	mg/L				

	2	MARK "X"	•			3. E	FFLUENT				4. UN	ITS	5. INT/	AKE (optiona	zl)
1. POLLUTANT AND CAS NUMBER	8.	b.	C.	a. MAXIMUM DAI	LY VALUE	b. MAXIMUM 30 ( (if availal		c. LONG TERN VALUE (if ava			a. CONCEN-		a. LONG T AVERAGE \		
(if available)	TESTING REQUIRED		BELIEVED ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES		b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OI ANALYSE
GC/MS FRACTION	- BASE/NE	EUTRAL CO	MPOUND	S (continued)											
43B. N-Nitro- sodiphenylamine (86-30-6)			X	ND						1	mg/L				
44B. Phenanthrene (85-01-8)			X	ND						1	mg/L				
45B. Pyrene (129-00-0)			X	ND						1	mg/L				
46B. 1,2,4-Tri- chlorobenzene (120-82-1)			X	ND						1	mg/L				
GC/MS FRACTION	- PESTICI	DES						,		·			,	·	.,
1P. Aldrin (309-00-2)			X	ND						1	ug/L				
2P. α-BHC (319-84-6)			X	ND						1	ug/L				
3P. β-BHC (319-85-7)			X	ND						1	ug/L				
4P. γ-BHC (58-89-9)			X	ND						1	ug/L				
5P, δ-BHC (319-86-8)			X	ND						1	ug/L				
6P. Chlordane (57-74-9)			X	ND						. 1	ug/L				
7P. 4,4'-DDT (50-29-3)			X	ND						1	ug/L				
8P. 4,4'-DDE (72-55-9)			X	ND						1	ug/L				
9P. 4,4'-DDD (72-54-8)			X	ND			*******************			1	ug/L				
10P. Dieldrin (60-57-1)			X	ND						1	ug/L				
11P. α-Enosulfan (115-29-7)			X	ND						1	ug/L				
12P. ()-Endosulfan (115-29-7)			X	ND						1	ug/L				
13P. Endosulfan Sulfate (1031-07-8)			X	ND						1	ug/L				
14P. Endrin (72-20-8)			X	ND						1	ug/L				
15P. Endrin Aldehyde (7421-93-4)			X	ND						1	ug/L				
16P. Heptachlor (76-44-8)			X	ND						1	ug/L				

EPA I.D. NUMBER (copy from Item 1 of Form 1)

UTFALL NUMBER

CONTINUED FRO	M PAGE V-	8			V2	A0032000		00	2						
		2. MARK "X"	-			3. E	FFLUENT				4. UN	ITS	5. INTA	AKE (options	zl)
1. POLLUTANT AND CAS NUMBER	а.	b.	C.	 	ILY VALUE	b. MAXIMUM 30 (if availa		c. LONG TERM VALUE (if ava			- 00110511		a. LONG T AVERAGE V		
(if available)	TESTING REQUIRED	BELIEVED PRESENT		(1) NTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	a. CONCEN- TRATION	b. MASS	(1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION	N - PESTICI	DES (contin	ued)												-
17P. Heptachlor Epoxide (1024-57-3)			X	ND						1	ug/L				
18P. PCB-1242 (53469-21-9)			X	ND						1	ug/L				
19P. PCB-1254 (11097-69-1)			X	ND						1	ug/L				
20P. PCB-1221 (11104-28-2)			X	ND						1	ug/L				
21P. PCB-1232 (11141-16-5)			X	ND						1	ug/L				
22P. PCB-1248 (12672-29-6)			X	ND						1	ug/L			~	
23P. PCB-1260 (11096-82-5)			X	ND						1	ug/L				
24P. PCB-1016 (12674-11-2)			X	ND						1	ug/L				
25P. Toxaphene (8001-35-2)			X	ND						1	ug/L				

EPA Form 3510-2C (8-90)

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# ATTACHMENT A DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY CRITERIA MONITORING

Effective January 1, 2012, all analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:

http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL <sup>(1)</sup>	REPORTING RESULTS	SAMPLE TYPE <sup>(2)</sup>	SAMPLE FREQUENCY
er Age		MET/	ALS			
7440-36-0	Antimony, dissolved	EPA 200.8	5.0	<5.0	G	1/5 YR
7440-38-2	Arsenic, dissolved	EPA 200.8	1.0	<1.0	G	1/5 YR
7440-43-9	Cadmium, dissolved	EPA 200.8	1.0	<1.0	G	1/5 YR
16065-83-1	Chromium III, dissolved (6)	EPA 200.8	1.0	<1.0	G	1/5 YR
18540-29-9	Chromium VI, dissolved (6)	EPA 200.8	1.0	<1.0	G	1/5 YR
7440-50-8	Copper, dissolved	EPA 200.8	1.0	27	G	1/5 YR
7439-92-1	Lead, dissolved	EPA 200.8	1.0	<1.0	G	1/5 YR
7439-97-6	Mercury, dissolved	EPA 245.1	0.00020 mg/L	<0.00020 mg/L	G	1/5 YR
7440-02-0	Nickel, dissolved	EPA 200.8	1.0	<1.0	G	1/5 YR
7782-49-2	Selenium, Total Recoverable	EPA 200.8	1.0	<1.0	G	1/5 YR (FW)
7440-22-4	Silver, dissolved	EPA 200.8	1.0	<1.0	G	1/5 YR
7440-28-0	Thallium, dissolved	EPA 200.8	1.0	<1.0	G	1/5 YR
7440-66-6	Zinc, dissolved	EPA 200.8	20	<20	G	1/5 YR
		PESTICIDE	ES/PCBs		deretagaya da se	
309-00-2	Aldrin	608	0.05	<0.040	С	1/5 YR
57-74-9	Chlordane	608	0.2	<2.0	С	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	8141B	1.0	<1.0	С	1/5 YR
72-54-8	DDD	608	0.1	<0.040	С	1/5 YR
72-55-9	DDE	608	0.1	<0.040	С	1/5 YR
50-29-3	DDT	608	0.1	<0.040	С	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL <sup>(1)</sup>	REPORTING RESULTS	SAMPLE TYPE <sup>(2)</sup>	SAMPLE FREQUENCY
8065-48-3	Demeton (synonym = Dementon-O,S)	8141B	2.0	<2.0	С	1/5 YR
333-41-5	Diazinon	8141B	1.0	<1.0	С	1/5 YR
60-57-1	Dieldrin	608	0.1	<0.040	С	1/5 YR
959-98-8	Alpha-Endosulfan (synonym = Endosulfan I)	608	0.1	<0.040	С	1/5 YR
33213-65-9	Beta-Endosulfan (synonym = Endosulfan II)	608	0.1	<0.040	С	1/5 YR
1031-07-8	Endosulfan Sulfate	608	0.1	<0.040	С	1/5 YR
72-20-8	Endrin	608	0.1	<0.040	С	1/5 YR
7421-93-4	Endrin Aldehyde	608	0.040	<0.040	С	1/5 YR
86-50-0	Guthion (synonym = Azinphos Methyl)	8141B	1.0	<1.0	С	1/5 YR
76-44-8	Heptachlor	608	0.05	<0.040	С	1/5 YR
1024-57-3	Heptachlor Epoxide	608	0.040	<0.040	С	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608	0,040	<0.040	С	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608	0.040	<0.040	С	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC (syn. = Lindane)	608	0.040	<0.040	С	1/5 YR
143-50-0	Kepone	8270D	38	<38	С	1/5 YR
121-75-5	Malathion	8141B	1.0	<1.0	С	1/5 YR
72-43-5	Methoxychlor	8081B	0.10	<0.10	С	1/5 YR
2385-85-5	Mirex	8081 B	0.050	<0.050	С	1/5 YR
56-38-2	Parathion (synonym = Parathion Ethyl)	8141 B	1.0	<1.0	С	1/5 YR
1336-36-3	PCB, total	608	7.0	<7.0	С	1/5 YR
8001-35-2	Toxaphene	608	5.0	<2.0	С	1/5 YR
	BASE N	NEUTRAL E	XTRACTA	BLES		
83-32-9	Acenaphthene	625	10.0	<5.0	С	1/5 YR
120-12-7	Anthracene	625	10.0	<5.0	С	1/5 YR
92-87-5	Benzidine	625	5.0	<5.0	С	1/5 YR
56-55-3	Benzo (a) anthracene	625	10.0	<5.0	С	1/5 YR
205-99-2	Benzo (b) fluoranthene	625	10.0	<5.0	С	1/5 YR
207-08-9	Benzo (k) fluoranthene	625	10.0	<5.0	С	1/5 YR
50-32-8	Benzo (a) pyrene	625	10.0	<5.0	С	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	625	5.0	<5.0	С	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL <sup>(1)</sup>	REPORTING RESULTS	SAMPLE TYPE <sup>(2)</sup>	SAMPLE FREQUENC
108-60-1	Bis 2-Chloroisopropyl Ether	625	5.0	<5.0	С	1/5 YR
117-81-7	Bis 2-Ethylhexyl Phthalate (syn. = Di-2-Ethylhexyl Phthalate)	625	10.0	<5.0	С	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0	<5.0	С	1/5 YR
91-58-7	2-Chloronaphthalene	625	5.0	<5.0	С	1/5 YR
218-01-9	Chrysene	625	10.0	<5.0	С	1/5 YR
53-70-3	Dibenzo (a,h) anthracene	625	20.0	<5.0	С	1/5 YR
95-50-1	1,2-Dichlorobenzene	624	10.0	<500	G	1/5 YR
541-73-1	1,3-Dichlorobenzene	/624	10.0	<500	G	1/5 YR
106-46-7	1,4-Dichlorobenzene	/624	10.0	<500	G	1/5 YR
91-94-1	3,3-Dichlorobenzidine	625	5.0	<5.0	С	1/5 YR
84-66-2	Diethyl phthalate	625	5.0	<5.0	С	1/5 YR
131-11-3	Dimethyl phthalate	625	5.0	<5.0	С	1/5 YR
84-74-2	Di-n-butyl Phthalate (synonym = Dibutyl Phthalate)	625	10.0	<5.0	С	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0	<5.0	С	1/5 YR
122-66-7	1,2-Diphenylhydrazine	625	5.0	<5.0	С	1/5 YR
206-44-0	Fluoranthene	625	10.0	<5.0	С	1/5 YR
86-73-7	Fluorene	625	10.0	<5.0	С	1/5 YR
118-74-1	Hexachiorobenzene	625	5.0	<5.0	С	1/5 YR
87-68-3	Hexachlorobutadiene	625	5.0	<5.0	С	1/5 YR
77-47-4	Hexachlorocyclopentadiene	625	5.0	<5.0	С	1/5 YR
67-72-1	Hexachloroethane	625	5.0	<5.0	С	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	625	20.0	<5.0	С	1/5 YR
78-59-1	Isophorone	625	10.0	<5.0	С	1/5 YR
98-95-3	Nitrobenzene	625	10.0	<5.0	С	1/5 YR
62-75-9	N-Nitrosodimethylamine	625	5.0	<5.0	С	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	625	5.0	<5.0	С	1/5 YR
86-30-6	N-Nitrosodiphenylamine	625	5.0	<5.0	С	1/5 YR
129-00-0	Pyrene	625	10.0	<5.0	С	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0	<5.0	С	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL <sup>(1)</sup>	REPORTING RESULTS	SAMPLE TYPE <sup>(2)</sup>	SAMPLE FREQUENCY
107-02-8	Acrolein	624	2,000	<2,000	G	1/5 YR
107-13-1	Acrylonitrile	624	2,000	<2,000	G	1/5 YR
71-43-2	Benzene	624	10.0	<500	G	1/5 YR
75-25-2	Bromoform	624	10.0	<500	G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0	<500	G	1/5 YR
108-90-7	Chlorobenzene (synonym = Monochlorobenzene)	624	50.0	<500	G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0	<500	G	1/5 YR
67-66-3	Chloroform	624	10.0	<500	G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0	<500	G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0	<500	G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0	<500	G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	624	500	<500	G	1/5 YR
78-87-5	1,2-Dichloropropane	624	500	<500	G	1/5 YR
542-75-6	1,3-Dichloropropene	624	500	<500	G	1/5 YR
100-41-4	Ethylbenzene	624	10.0	<500	G	1/5 YR
74-83-9	Methyl Bromide (synonym = Bromomethane)	624	500	<500	G	1/5 YR
75-09-2	Methylene Chloride (synonym = Dichloromethane)	624	20.0	<500	G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	624	500	<500	G	1/5 YR
127-18-4	Tetrachloroethylene (synonym = Tetrachloroethene)	624	10.0	<500	G	1/5 YR
10-88-3	Toluene	624	10.0	<500	G	1/5 YR
79-00-5	1,1,2-Trichloroethane	624	500	<500	G	1/5 YR
79-01-6	Trichloroethylene (synonym = Trichloroethene)	624	10.0	<500	G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0	<500	G	1/5 YR
	A	CID EXTRA	CTABLES		e aviscus visit	
95-57-8	2-Chlorophenol	625	10.0	<5.0	С	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0	<5.0	С	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0	· , <5.0	С	1/5 YR
51-28-5	2,4-Dinitrophenol	625	10.0	<10.0	С	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	625	5.0	<5.0	С.	1/5 YR
25154-52-3	Nonylphenol	ASTM D 7065-11	5.6	<5.6	G	1/5 YR

CASRN	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL <sup>(1)</sup>	REPORTING RESULTS	SAMPLE TYPE <sup>(2)</sup>	SAMPLE FREQUENCY
87-86-5	Pentachlorophenol	625	50.0	<10.0	С	1/5 YR
108-95-2	Phenol	625	10.0	<5.0	С	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0	<5.0	С	1/5 YR
1		MISCELLA	NEOUS			
776-41-7	Ammonia as NH3-N	SM 4500-NH3-F -2011	200	<200	С	1/5 YR
7782-50-5	Chlorine, Total Residual	SM 4500-CL G - 2011	200	<200	G	1/5 YR
57-12-5	Cyanide, Free <sup>(8)</sup>	SM 4500-CN C, E -2011	10.0	<10	G	1/5 YR
1746-01-6	Dioxin (synonym = 2,3,7,8- tetrachlorodibenzo-p-dioxin) (ppq)	1613B	0.00001	<000000249	С	1/5 YR [Paper Mills & Oil Refineries]
N/A	E. coli / Enterococcus (N/CML)	2010 Quantitative Analysis for Coliforms/ Enterococci (Non-Potable)	(4)	21.6 / 86.3	G	1/5 YR
18496-25-8	Sulfide, dissolved (7)	S4500S2F-00	100	<100	С	1/5 YR
60-10-5	Tributyltin	Organotins/ GC (GC/FPD)	0.044	<0.044	С	1/5 YR
471-34-1	Hardness (mg/L as CaCO <sub>3</sub> )	(3)	(4)	121	G or C	1/5 YR (FW & TZs)

Craig Georg, Director, Standards and Compliance Division

Name of Principal Executive Officer or Authorized Agent & Title

Signature of Principal Executive Officer or Authorized Agent & Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

### FOOTNOTES:

Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (1)(e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

### (2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour (PW - Revise as required to require same composite duration as BOD<sub>5</sub>) composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

- (3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from any approved method presented in 40 CFR Part 136.
- (4) The QL is at the discretion of the permittee. If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].</p>
- (5) Analytical Methods: Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996 (currently the only Virginia Environmental Laboratory Accreditation Program (VELAP) accredited method).
- (6) Both Chromium III and Chromium VI may be measured by the total chromium analysis. The total chromium analytical test QL shall be less than or equal to the lesser of the Chromium III or Chromium VI method QL listed above. If the result of the total chromium analysis is less than the analytical test QL, both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (7) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].
- (8) Free cyanide may be measured by the total cyanide analysis. The total cyanide analytical test QL shall be less than or equal to the free cyanide method QL listed above. If the result of the total cyanide analysis is less than the analytical test QL, free cyanide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].</p>